

Attorney Docket No. 06666-033002
Application No. 09/681,622
Amendment dated March 30, 2004
Reply to Office Action dated December 30, 2003

Amendment to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Previously presented) A method, comprising:
applying an input optical beam to an array of reflector elements;
reflecting said input optical beam through said array to form an output optical beam; and
controlling said reflector elements using multiple digital bits, such that each change of each single digital bit changes an output position of said output optical beam.

2. (Currently amended) A method as in claim 1, wherein said ~~mirror~~ array of reflector elements includes a plurality of moving mirrors, each of which deflects said input optical beam according to said digital bits.

3. (Original) A method as in claim 2, wherein at least some of said plurality of moving mirrors are each moved by a different amount than others of said moving mirrors.

Attorney Docket No. 06666-033002
Application No. 09/691,622
Amendment dated March 30, 2004
Reply to Office Action dated December 30, 2003

4. (Withdrawn) A method as in claim 2, wherein said plurality of moving mirrors are each moved by the same amount.

5. (Original) A method as in claim 2 wherein each of said plurality of moving mirrors has a substantially different size.

6. (Withdrawn) A method as in claim 1, wherein said mirror array includes an array of movable mirrors, and at least one unmovable mirror, positioned in a location to reflect light from one of said movable mirrors to another of said movable mirrors.

7. (Withdrawn) A method as in claim 6, wherein said unmovable mirror is substantially flat.

8. (Withdrawn) A method as in claim 6, wherein said unmovable mirror is substantially curved.

9. (Withdrawn) A method as in claim 6, wherein said unmovable mirror includes a plurality of separated parts, collectively defining a curved profile, but each of said separated parts being substantially flat.

Attorney Docket No. 06666-033002
Application No. 09/681,622
Amendment dated March 30, 2004
Reply to Office Action dated December 30, 2003

10. (Withdrawn) A method as in claim 6, wherein said unmovable mirror includes a plurality of angled surfaces.

11. (Withdrawn) A method as in claim 6, wherein said angled surfaces are Fresnel surfaces.

12. (Withdrawn) A method as in claim 4, further comprising changing an angle of attack for each of a plurality of reflections.

13. (Withdrawn) A method as in claim 1, wherein said mirror array includes a first sub array of movable mirrors extending along a first specified shaped surface, and a second sub array of movable mirrors extending along a second specified shaped surface.

14. (Withdrawn) A method as in claim 13, wherein said first and second shaped surfaces are substantially flat.

15. (Withdrawn) A method as in claim 13, wherein said first and second specified shaped surfaces are substantially curved.

Attorney Docket No. 06666-033002
Application No. 09/681,622
Amendment dated March 30, 2004
Reply to Office Action dated December 30, 2003

16. (Withdrawn) A method as in claim 15, wherein each of said mirrors are substantially flat.

17. (Withdrawn) A method as in claim 13, wherein each of said reflector elements includes a reflective membrane which is moved between first and second positions.

18. (Withdrawn) A method as in claim 13, wherein each of said reflector elements includes first and second parts which are movable relative to one another.

19. (Original) An optical device comprising:
an array of movable reflector elements; and
a controller for said array of reflector elements, said controller operating based on a plurality of digital bits which operate to change a position of said array of reflector elements to produce an output beam at a position based on said digital bits.

20. (Withdrawn) A device as in claim 19, wherein each of said reflector elements comprises a movable, reflective membrane.

Attorney Docket No. 06666-033002
Application No. 09/681,622
Amendment dated March 30, 2004
Reply to Office Action dated December 30, 2003

21. (Withdrawn) A device as in claim 19, wherein each of said reflector elements comprises first and second parts, which reflect light from a first location when touching one another, and reflect light from a second location when not touching one another, and an element for moving said first and second parts relative to one another.

21. (Withdrawn) A device as in claim 19, further comprising a plane mirror, which reflects between different ones of said reflector elements.

22. (Withdrawn) A device as in claim 21, wherein said plane mirror is substantially flat.

23. (Withdrawn) A device as in claim 21, wherein said plane mirror is formed along a curved area.

24. (Withdrawn) A device as in claim 23, wherein said plane mirror is formed of a plurality of different mirrored elements, each of which is substantially flat.

25. (Withdrawn) A device as in claim 19, wherein each of said reflector elements are movable by different amounts.

Attorney Docket No. 06666-033002
Application No. 09/681,622
Amendment dated March 30, 2004
Reply to Office Action dated December 30, 2003

26. (Original) A device as in claim 19, wherein each of said reflector elements are movable by different amounts.

27. (Withdrawn) A device as in claim 19, wherein each of said plurality of moving mirrors has a substantially different size.

28. (Currently amended) A device as in claim 19, wherein each of said plurality of ~~moving mirrors~~ movable reflector element has a substantially different size.

29. (Currently amended) ~~A device~~ An assembly comprising:
an optical device comprising an array of movable reflector elements; and

a controller for said array of reflector elements, said controller operating based on a plurality of digital bits which operate to change a position of said array of reflector elements to produce an output beam at a position based on said digital bits;

a device wherein each of said plurality of moving mirrors has a substantially different size;

a series of said movable mirrors; and

Attorney Docket No. 06666-033002
Application No. 09/681,622
Amendment dated March 30, 2004
Reply to Office Action dated December 30, 2003

at least a plurality of said movable mirrors are twice as
large as a movable mirror prior to it in said series.